

101.4 - High Alloy Steels (chip form) [150-g units (unless otherwise noted)]

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	126c	344	345a	346a	862	868
Description	High-Nickel Steel (36 % Ni)	15 Chromium-7 Nickel Steel (Mo Precipitation Hardening)	HA Steel, (Cu Precipitation Hardening)	Valve Steel	High-Temperature Alloy L 605	High Temp. Alloy Fe-Ni-Co
Unit of Issue	(150 g)	(150 g)	(150 g)	(150 g)	(100 g)	(100 g)

Elemental Composition (mass fraction in %)

Al (total)	1.16	(<0.001)	(0.001)	0.026	0.99
Boron (B)		(<0.001)	(<0.001)	(<0.005)	0.0078
Carbon (C)	0.02540	0.069	0.040	0.502	0.120
Chromium (Cr)	0.0625	14.95	15.52	21.08	20.0
Cobalt (Co)	0.0080		0.099	(0.05)	15.1
Copper (Cu)	0.0396	0.106	3.39	0.375	0.0010
Iron (Fe)				(<0.0001)	40.5
Manganese (Mn)	0.4684	0.57	0.79	9.16	1.59
Molybdenum (Mo)	0.0110	2.40	0.43	0.237	1.80
Nickel (Ni)	36.054	7.28	4.27	3.43	9.74
Niobium (Nb)			0.27	(0.01)	(<0.01)
Nitrogen (N)			0.031	0.442	
Phosphorus (P)	0.00350	0.018	0.024	0.031	0.002
S (Comb)	0.0050	0.019	0.012	0.002	0.0008
Silicon (Si)	0.1936	0.395	0.61	0.219	0.017

Elemental Composition (mass fraction in %)

Tantalum (Ta)				(<0.01)	0.003
Tin (Sn)				(0.008)	
Titanium (Ti)	0.076	(<0.001)	(<0.001)	51.5	1.48
Tungsten (W)		0.309			
Vanadium (V)	(0.001)	0.040	0.080	0.096	0.005
					0.077

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only